

326 IAC 8-9 Volatile Organic Liquid (VOL) Storage

Description

The proposed control measure would expand existing Reasonably Available Control Technologies requirements for volatile organic liquid storage tanks in certain Indiana counties regulated under 326 IAC 8-9 to other areas of the state. The control measure requires that fixed roof storage tanks install an internal floating roof with primary seals. Internal floating roofs must have continuous seals. External floating roofs be equipped with primary and secondary seals. Sources also have the option of routing vapors to a control device.

The control measure would be applicable to companies with storage tanks with a capacity greater than or equal to 39,000 gallons which store a volatile organic liquid with a vapor pressure between 0.75 and 11.1 pounds per square inch absolute. Some common volatile liquids which fall into this vapor pressure range at typical temperatures include benzene, toluene, xylene, alcohols, trichloroethylene, and hexane. Source Standard Industrial Classification (SIC) codes most likely affected by this control measure include 2911 (petroleum refineries), 2865, 2869 and 2899 (organic chemical manufacturers), 461X (pipelines), and 5171 (petroleum bulk stations and marketing terminals), however other sources which store volatile liquids would also be affected.

The program could be implemented by state or local rule.

Emission Reductions

Emission reductions depend on the vapor pressure of the volatile liquid stored, the type and size of the storage tank and the throughput (i.e., the amount of volatile liquid stored over the course of a year). IDEM estimates that this control measure will result in an emission reduction of 96 percent for fixed roof storage tank conversions. For internal floating roof tanks, an emission reduction of 29 percent is estimated. For external floating roof tanks, an emission reduction of 50 percent is estimated.

Cost Effectiveness

Cost effectiveness also depends on the vapor pressure of the liquid stored, the type and size of the storage tank and the throughput. Cost effectiveness ranges from \$380 to \$520 per ton of Volatile Organic Compound (VOC) reduced.

Implementation Issues

Start up time: Most sources could come into compliance within one year of promulgation of a final state rule. The existing state rule does allow additional time for internal floating roofs to be upgraded during the next cleaning, not to exceed 10 years.

Enforcement: Inspections would assure compliance.

Applicability: The control measure could be applicable to major sources on either a regional basis or statewide.

Comments

To learn more about 326 IAC 8-9 Volatile Organic Liquid (VOL) Storage, contact Jon Bates at (800) 451-6027 press 0 and ask for extension 3-4226 or dial direct at (317) 233-4226.